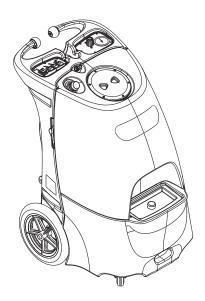




# INFORMATION AND OPERATING INSTRUCTIONS INFORMACIÓN E INSTRUCCIONES DE USO INFORMATION ET DIRECTIVES D'UTILISATION



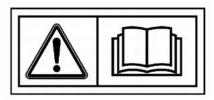
# PEX 500-HM12060 Owner's Manual

MODEL: 56384887

Universal Cleaning Concepts LLC 1500 Industry Street, Suite 300 Everett, WA USA 98203

56384887 Rev. B, November 2023

A-English B-Español C-Français





CAUTION: DO NOT OPERATE MACHINE UNTIL YOU HAVE READ ALL SECTIONS OF THIS INSTRUCTION MANUAL PRECAUCIÓN: NO UTILICE LA MÁQUINA HASTA HABER LEÍDO TODAS LAS SECCIONES DE ESTE MANUAL DE INSTRUCCIONES ATTENTION: N'UTILISEZ PAS LA MACHINE AVANT D'AVOIR LU TOUTES LES SECTIONS DU PRÉSENT MANUEL

IMPROPER USE OF THE MACHINE WILL VOID THE WARRANTY
EL USO INCORRECTO DE LA MÁQUINA ANULARÁ LA GARANTÍA
UNE UTILISATION INCORRECTE DE LA MACHINE ANNULERA LA GARANTIE



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#### INTRODUCTION

This manual will help you get the most from your Carpet Extractor. Read it thoroughly before operating the machine.

This product is intended for commercial use only.

#### PARTS AND SERVICE

Repairs, when required, should be performed by an authorized HydraMaster distributor, who employs factory trained service personnel, and maintains an inventory of original replacement parts and accessories.

Please contact the SERVPRO RMA/warranty to initiate service and locate an authorized service center near you.

#### **MODIFICATIONS**

Modifications and additions to the cleaning machine which affect capacity and safe operation shall not be performed by the customer or user without prior written approval from HydraMaster LLC. Unapproved modifications will void the machine warranty and make the customer liable for any resulting accidents.

#### **NAMEPLATE**

The Model Number and Serial Number of your machine are shown on the Nameplate, located on the rear base of the machine. This information is needed when ordering repair parts for the machine. Use the space below to note the Model Number and Serial Number of your machine for future reference. **Be sure to register your warranty.** 

MODEL		 	
SERIAL NUMBER	<u></u>	 	

#### **UNCRATING THE MACHINE**

When the machine is delivered, carefully inspect the shipping carton and the machine for damage. If damage is evident, save the shipping carton so that it can be inspected. Please contact the SERVPRO RMA/warranty to initiate service and locate an authorized service center near you.

### ⚠ WARNING!

The Products sold with this Manual contain or may contain chemicals that are known to certain governments (such as the State of California, as identified in its Proposition 65 Regulatory Warning Law) to cause cancer, birth defects or other reproductive harm. In certain locations (including the State of California) purchasers of these Products that place them in service at an employment job site or a publicly accessible space are required by regulation to make certain notices, warnings or disclosures regarding the chemicals that are or may be contained in the Products at or about such work sites. It is the purchaser's responsibility to know the content of, and to comply with, any laws and regulations relating to the use of these Products in such environments. The Manufacturer disclaims any responsibility to advise purchasers of any specific requirements that may be applicable to the use of the Products in such environments.



### IMPORTANT SAFETY INSTRUCTIONS

This machine is only suitable for commercial use, for example in hotels, schools, hospitals, factories, shops and offices other than normal residential housekeeping purposes.

When using any electrical appliance, basic precautions should always be followed, including the following:



**NOTE**: Read all instructions before using this machine.

# ⚠ WARNING!

#### To reduce the risk of fire, electric shock, or injury:

- This machine is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge.
- Do not leave the machine unattended when it is plugged in. Unplug the unit from the outlet when; not in use, before cleaning the machine, prior to servicing or performing any maintenance on the machine, and when replacing parts or converting the machine to another function.
- To avoid electric shock, do not expose to rain or snow. Store and use machine indoors only, store in a heated location. *Do not let the machine or wand freeze.*
- Do not allow to be used as a toy. Close attention is necessary when used near children.
- High pressure cleaners shall not be used by children or untrained personnel.
- Use only as described in this manual. Use only the manufacturer's recommended attachments.
- Never add water over 130° F/54° C to the solution tank.
- Always use a defoamer when foaming occurs to prevent vacuum motor damage (SERVPRO Defoamer item #151).
- Do not let the pump run dry.
- Do not use with damaged cord or plug. If the machine is not working as it should, has been dropped, damaged, left outdoors or dropped into water, please contact the SERVPRO RMA/warranty to initiate service and locate an authorized service center near you.
- Turn off all controls before unplugging.
- Do not pull by the cord, use the cord as a handle, close a door on the cord, or pull the cord around sharp edges or corners. Do not run the machine over the cord. Keep the cord away from heated surfaces. To unplug, grasp the plug, not the cord.
- Do not handle the plug, the cord or the machine with wet hands.
- Extension cords must be 12/3 and no longer than 50 feet. Replace the cord or unplug immediately if the ground prong becomes damaged.
- Connect to a properly grounded outlet only.
- Do not put any object into openings. Do not use with any opening blocked; keep free of dust, lint, hair, and anything that may reduce air flow.
- Keep loose clothing, hair, fingers, and all parts of body away from openings and moving parts.
- Do not pick up anything that is burning or smoking, such as cigarettes, matches, or hot ashes, or any health endangering dusts. Do not use to pick up flammable or combustible liquids such as gasoline or use in areas where they may be present.
- Risk of explosion Do not spray flammable liquids.
- Use extra care when cleaning on stairs.
- Wear gloves or use rags when removing quick disconnects to prevent burns.
- Liquid ejected at the spray nozzle could be dangerous as a result of its temperature, pressure, or chemical content.



- High pressure jets can be dangerous if subject to misuse. The jet must not be directed at persons, live electrical
  equipment or the machine itself.
- Do not use the machine within range of persons unless they wear protective clothing.
- Do not direct the jet against yourself or others in order to clean clothes or foot-wear.
- High pressure hoses, fittings and couplings are important for the safety of the machine. Use only hoses, fittings and couplings recommended by the manufacturer.
- To ensure machine safety, use only original spare parts from the manufacturer or approved by the manufacturer.
- Water that has flown through backflow preventers is considered to be non-potable.
- Do not use the machine if a supply cord or important parts of the machine are damaged, e.g. safety devices, high pressure hoses, trigger gun.

#### 120VAC GROUNDING INSTRUCTIONS

This appliance must be grounded. If it should electrically malfunction, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This appliance is equipped with a cord having an equipment-grounding conductor and grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

### ▲ DANGER!

Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with the appliance. If it will not fit the outlet, have a proper outlet installed by a qualified electrician.

This appliance is for use on a nominal 120-volt circuit, and has a grounding plug that looks like the plug illustrated in Figure 1 below. A temporary adapter illustrated in Figures 2 and 3 may be used to connect this plug to a 2-pole receptacle as shown in Figure 2 if a properly grounded outlet is not available. The temporary adapter should be used only until a properly grounded outlet (Figure 1) can be installed by a qualified electrician. The green-colored rigid ear, tab, or the like extending from the adapter must be connected to a permanent ground such as a properly grounded outlet box cover. Whenever the adapter is used, it must be held in place by a metal screw. Grounding adapters are not approved for use in Canada.

Replace the plug if the grounding pin is damaged or broken.

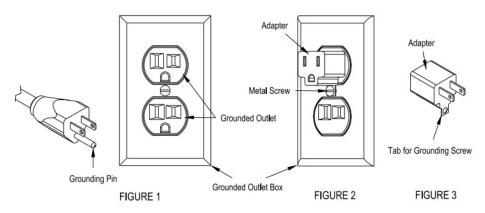
The Green (or Green/Yellow) wire in the cord is the grounding wire. When replacing a plug, this wire must be attached to the grounding pin only.

Extension cords connected to this machine should be 12 gauge, three-wire cords with three-prong plugs and outlets. DO NOT use extension cords more than 50 feet (15 m) long.



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- · If an extension cord is used, the plug and socket must be of watertight construction.
- Inadequate extension cords can be dangerous.
- Extension cords must be 12/3 and no longer than 50 feet. Replace the cord or unplug immediately if the ground prong becomes damaged.



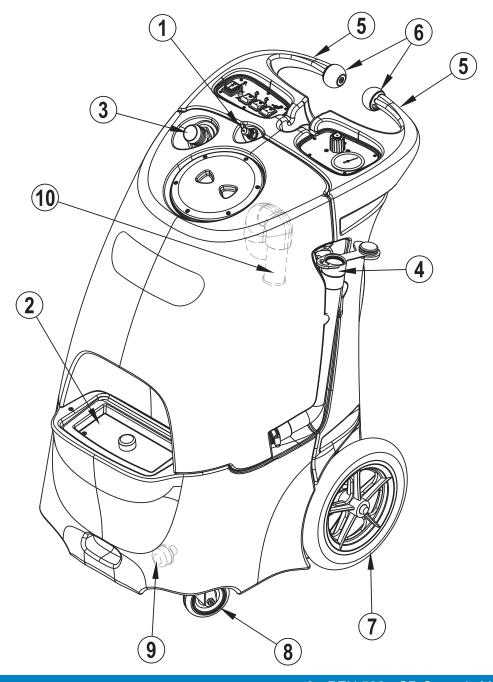
PLEASE NOTE: FOR NORTH AMERICA ONLY

Grounding adapters are not approved for use in Canada.



### **KNOW YOUR MACHINE**

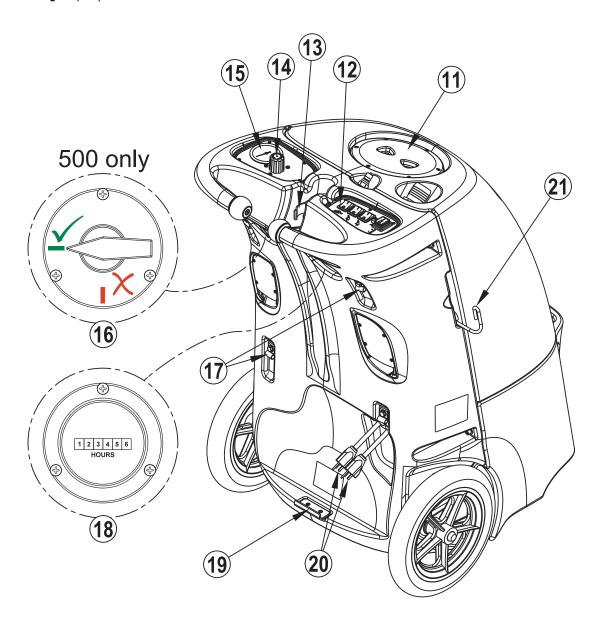
- 1 Solution Hose Quick Disconnect
- 2 Solution Tank Fill Opening
- 3 Vacuum Hose Barb
- 4 Drain Hose
- 5 Handles
- 6 Roller Balls
- 7 Wheel
- 8 Castor
- 9 Solution Filter
- 10 Recovery Tank Shutoff Float





### **KNOW YOUR MACHINE (CONTINUED)**

- 11 Recovery Tank Lid
- 12 Switch Plate
- 13 Wand Storage Clip
- 14 Pressure Adjustment Knob
- 15 Pressure Gauge
- 16 Pressure Relief Valve
- 17 Cord Retainer Straps (four)
- 18 Hour Meter (Optional)
- 19 Wand Retainer Bracket
- 20 Power Cords
- 21 Hose Hangers (two)





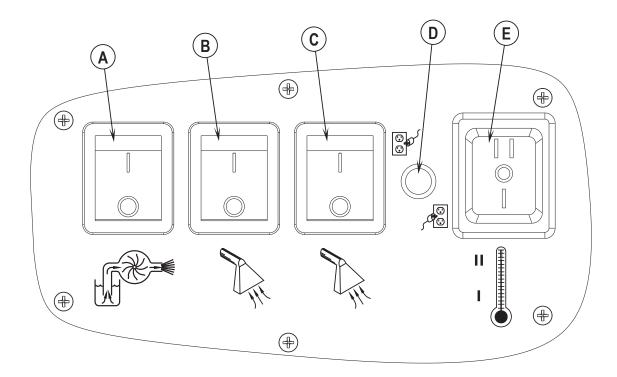
#### **KNOW YOUR SWITCH PLATE**

- A Solution Pump Switch This switch turns the solution pump ON and OFF.
- B Vacuum Switch This switch turns the first of the two vacuum motors ON and OFF.
- C Vacuum Switch This switch turns the second of the two vacuum motors ON and OFF.
- **D** Circuit Indicator When this light is on, it indicates that the two cords are on a separate circuit.

### **△** CAUTION!

The circuit breaker in the wall panel can trip if both cords are on the same circuit.

**E Heat Switch** - This three position switch controls the water temperature. Position (I) is low temperature, Position (O) is OFF and Position (II) is high temperature.





#### PREPARING THE MACHINE FOR USE

See the diagrams in the "Know Your Machine" section.

- 1 Inspect the machine, hoses, and cleaning tools for cleanliness and completeness.
- 2 Screw the Recovery Tank Lid (11) closed. Ensure the drain cap is closed tightly.
- 3 Pre-spray spots and heavy traffic areas before extracting with the detergent of your choice. Mix the pre-spray according to the detergent manufacturer's directions.
- 4 Fill the solution tank with clear water (12 gal. / 45.5 L capacity). If desired, add a detergent or rinse of your choice (we recommend a CRI approved detergent). If you choose to add a detergent to the solution tank, be sure to mix well, and always follow the use & dilution instructions on the detergent label. *Only use a detergent with a pH between 5 and 10.* Although this machine is designed to supply instant hot water, the addition of warm water to the solution tank would increase heater efficiency. *Never use water above 130° F/54° C in the solution tank.*

### ⚠ CAUTION!

Use low-sudsing, liquid detergents designed for carpet extraction.

#### **OPERATING THE MACHINE**

#### See the diagrams on page A-14.

- 1 Follow the instructions in the *Preparing the Machine for Use* section of this manual.
- Turn off all the switches. Plug the power cords into properly grounded outlets. Do not connect both cords to the same outlet; the green, Circuit Indicator Light (D) on the switch plate should light up. If the indicator light does not come on, try different outlets until it does. "Do not connect both cords to the same outlet."
- **3** Attach the priming hose to the machine and place the open end into the solution tank.
- 4 Turn ON the solution pump (A) and let it run until the pump is fully primed (approximately 30 seconds to 1 minute). Once the pump is primed, turn off the pump and remove the priming hose.
- 5 Connect a solution line to the Solution Hose Quick Disconnect (1). Attach the other end of the solution line to the cleaning tool.

NOTE: If there is pressure built up in the solution lines, it may be difficult to connect a solution line to the Quick Disconnect (1). If this is the case place the Pump Switch (A) into the OFF (O) position. Momentarily turn the Pressure Relief Valve (16) from the green "checkmark" position to the red "X" position and back again to the green "checkmark" position, this will relieve the pressure to allow a solution line to be connected to the quick disconnect port.

### 

Always operate the machine with the Pressure Relief Valve set to the Green "checkmark" position to avoid possible damage.

- 6 Connect a vacuum hose to the Vacuum Hose Barb (3). Attach the other end of the vacuum hose to the cleaning tool.
- 7 To use heated water for cleaning, press the Heat Switch **(E)** into either the Low Temperature position **(I)** or the High Temperature position **(II)**. Wait two minutes for the heat exchanger to reach temperature.
- 8 Press the Pump Switch (A) to ON (I).
- 9 Press the Vacuum Switches (B & C) to ON (I). The machine can be used with only one vacuum motor running for less suction i.e. cleaning upholstery.
- 10 Spray through your tool a few times to fill the lines with solution. Begin cleaning.
- 11 To adjust the solution spray pressure; rotate the Pressure Adjustment Knob (14) clockwise to increase pressure and counterclockwise to decrease pressure. The pump spraying pressure will be observable at the Pressure Gauge (15) while spraying. Make sure the cleaning tool is spraying when adjusting the pressure, otherwise the pressure reading will be inaccurate
- Watch the fluid entering the Recovery Tank Lid (11). If there is a large amount of suds in the recovery tank, add a defoamer chemical (SERVPRO Defoamer item #151) to the recovery tank.

### 

- Empty the recovery tank before the fluid or foam enters the vacuum motor.
- If foam or liquid escapes from the machine, switch off immediately.



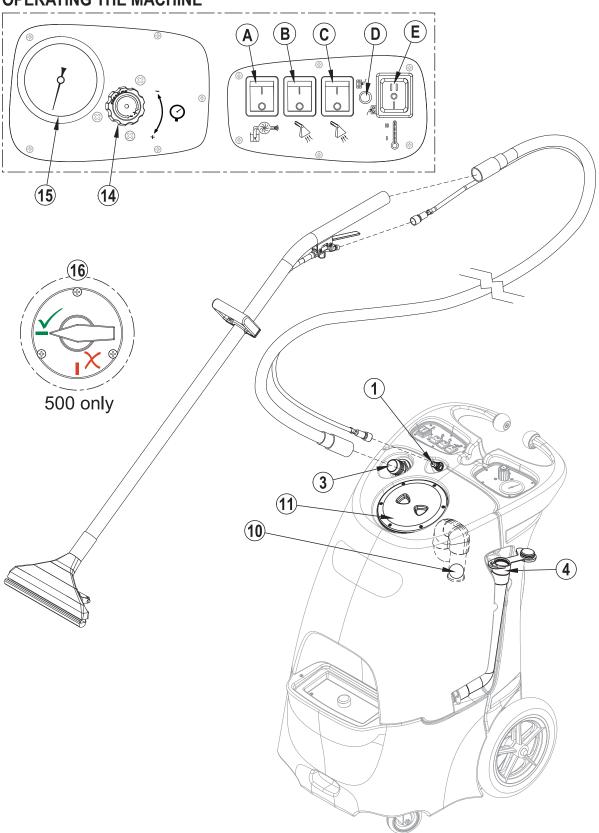
#### 

Always make sure the float is clean and travels freely before turning on the machine. A float that is stuck will cause the vacuum motor to suck in water, resulting in vac motor damage.

- The recovery tank has a Recovery Tank Shutoff Float (10) to block the vacuum system when the recovery tank is full. You can tell when the float closes by the sudden change in the sound of the vacuum motor. When the float closes, the recovery tank must be emptied. The machine can continue to dispense solution, but will not pick up water with the float closed.
- Monitor the water level in the solution tank. Do not let the pump run dry. When the solution tank gets low, turn off the pump and the vacuum motor(s), refill the solution tank with water and the proper ratio of cleaning detergent. Empty the recovery tank and continue cleaning.
- When the operator has completed the job; vacuum all unused solution from the solution tank into the recovery tank, turn off the pump, vacuum motor(s) and heat exchanger. Unplug the machine.
- Push the machine to a designated waste water "DISPOSAL SITE" and empty the recovery tank. To empty, loosen the Velcro strap retaining the Recovery Tank Drain Hose (4) into its side storage location, then remove the plug (hold the end of the hose above the water level in the tank to avoid sudden, uncontrolled flow of waste water).
- 17 Follow the instructions in the *After Using the Machine* section of this manual.



### **OPERATING THE MACHINE**





#### AFTER USING THE MACHINE

See the diagrams on pages A-9, A-10 and A-14.

- 1 To empty the solution tank, open Solution Tank Fill Opening (2) and vacuum out all unused solution into the recovery tank using the vacuum hose. Rinse the tank with clean water.
- Turn all the Power Switches (A, B, C & E) to OFF (O). Unplug the Power Cords (20). Coil the cords and secure them to the rear of the machine using the four Cord Retainer Straps (17).
- To empty the recovery tank, loosen the Velcro strap retaining the Recovery Tank Drain Hose (4) into its side storage location. Direct the hose to a designated waste water "DISPOSAL SITE" and remove the plug (hold the end of the hose above the water level in the tank to avoid sudden, uncontrolled flow of waste water). Rinse the tank with clean water. Inspect the drain hose; replace if kinked or damaged.
- Disconnect the solution and vacuum hoses from the machine, at the Solution Hose Quick Disconnect (1) and Vacuum Hose Barb (3) respectively. Flush the vacuum hose with warm water to wash any debris out of the vacuum hose and cleaning tool. Inspect them for damage. Fold down the Hose Hangers (21) and the hoses can be wrapped around the machine for storage. Set the wand on the Wand Retainer Bracket (19) and secure to the back of the machine at the Wand Storage Clip (13). NOTE: Trigger wand when disconnecting solution line to release pressure.
- 5 Wipe the machine with a damp cloth. Do not use abrasive chemicals or solvents.
- **6** Perform any required maintenance before storage.

#### MAINTENANCE SCHEDULE

MAINTENANCE ITEM	Daily	Weekly	Yearly
Check / Clean Tanks & Hoses	•		
Check / Clean Recovery Tank Shut-Off Float	•		
Clean Extraction Wand/Tool	•		
Inspect & Clean Solution Filter		•	
*Check Carbon Brushes			•

<sup>\*</sup> Have a Hydramaster service technician check the vacuum motor carbon brushes once a year or after 300 operating hours. Check the pump motor carbon brushes every 500 hours or once a year.

### ▲ IMPORTANT!

Motor damage resulting from failure to service the carbon brushes is not covered under warranty. See the Limited Warranty Statement.

7 Store the machine indoors in a clean, dry place with the recovery tank lid open. *Keep from freezing*.

#### POWER CORD MAINTENANCE

Once a week (or more often if necessary), check the power cords for cracked or damaged insulation, exposed wires in the cord or plug, and damaged or missing ground pin. Repair or replace damaged cord or plug *immediately*.



### **TROUBLESHOOTING:**

<u>IF THIS</u> <u>OCCURS</u>	CHECK THIS
	Solution tank is empty, or filter is plugged.
	Clogged spray tip(s).
NO SPRAY	Pump not running or not primed.
NO SI IVAI	Valve on wand not operating.
	Solution hose not completely connected to machine.
	Contact your distributor for additional help.
LOW PUMP	Check to see that the pressure relief valve is fully seated in the green checkmark "operating" position.
PRESSURE	Contact your distributor for additional help.
PUMP DOES	Pump switch is not turned on.
NOT RUN	No power in the wall outlet - check to see if the breaker has tripped.
NOTRON	Contact your distributor for additional help.
	Debris is plugging cleaning tool or vacuum hose.
LOW SUCTION	Drain hose cap is not completely closed.
LOW GOOTION	Recovery tank lid is not seated, or gasket is damaged.
	Contact your distributor for additional help.
	Recovery tank is full and needs to be emptied.
NO SUCTION	Recovery tank ball float is stuck closed. Clean so ball moves freely.
110 000 11011	No power in the wall outlet - check to see if the breaker has tripped.
	Contact your distributor for additional help.
	Spraying too much water:
	Spraying too long. Try spraying for 12-15 seconds, or about three strokes.
	• Spray tips(s) too large. Use a maximum of two HydraMaster part number 000-076-122 spray tip(s).
LOW HEAT	Longer hose or larger diameter hose than recommended. Use a maximum of 25-foot-long 1/4 inch hose
	for best results.
	Heat exchanger needs to be flushed.
	Contact your distributor for additional help.
	Heat is not turned on.
NO HEAT	No power in the wall outlet - check to see if the breaker has tripped.
	Call your distributor for additional help.

# **TECHNICAL SPECIFICATIONS** (as installed and tested on the unit)

Model	635K
Model No.	56113150 (PEX 500H-SP)
Voltage/frequency	120 V / 60 Hz
Rated Current	15 Amp
Protection Class (electrical)	Class 1
Sound Pressure Level (IEC 60704-2-1)	68.7 dB LpA, 3 dB KpA
Total Weight	110 lbs. (49.8 kg)
Solution Tank Capacity	12 gal (45.5 L)
Recovery Tank Capacity	10 gal (37.8 L)



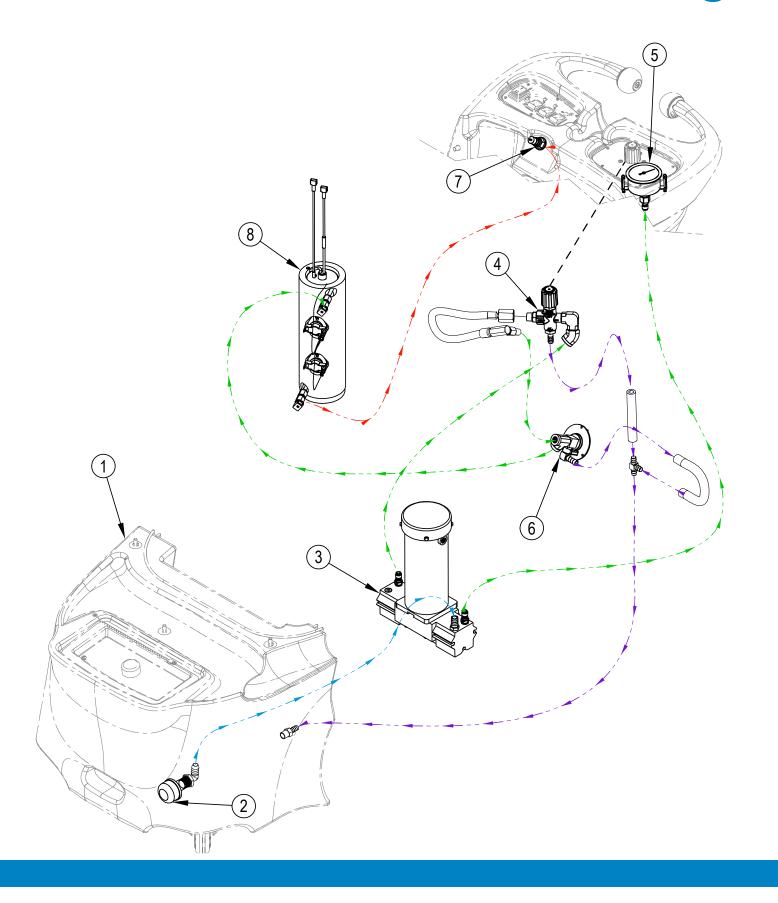


PEX 500 - Water Flow Diagram

# BLUE = FRESH WATER GREEN = 500 PSI WATER FLOW PURPLE = PRESSURE RELIEF RETURN TO TANK RED = 500 PSI HEATED WATER FLOW

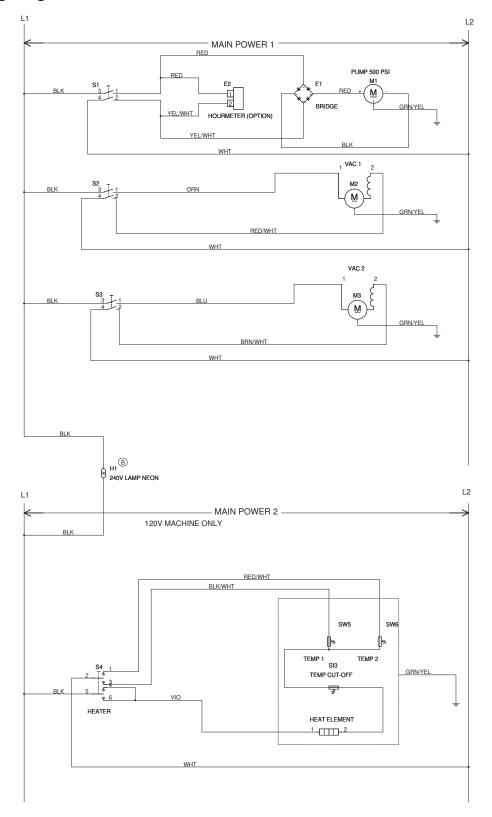
ITEM	DESCRIPTION	
1	Solution Tank	
2	Fresh Water Inlet Filter	
3	500PSI Pump	
4	Unloader Valve	
5	Pressure Gauge	
6	Pressure Relief Valve	
7	500PSI Quick Connect	
8	Heater	

# **Water Flow Diagram**



# **Electrical Diagrams**

# PEX 500 - Wiring Diagram





# **Wiring Diagram Parts List**

	•	•	
Item	Ref. No.	Qty.	Description
E1	1579	1	Rectifier, 15 Amp
E2	56113108	1	Kit-Hour Meter (Optional)
H1	227	1	Light Green
M1	56113101	1	Kit-Pump Motor 120V
M2	56113144	2	Vac Motor-120V-3 Stage
*	56113056	1	Vac Motor Brush Kit-120V
М3	56113144	2	Vac Motor 120V-3 Stage
*	56113056	1	Vac Motor Brush Kit-120V
S1	1644	1	Switch, Pump
S2	1644	1	Switch, Vac
S3	1644	1	Switch, Vac
S4	56113029	1	Switch, Heater
SW5	399	1	Thermostat
SW6	56113030	1	Thermostat
S13	81	1	Thermal Cutout



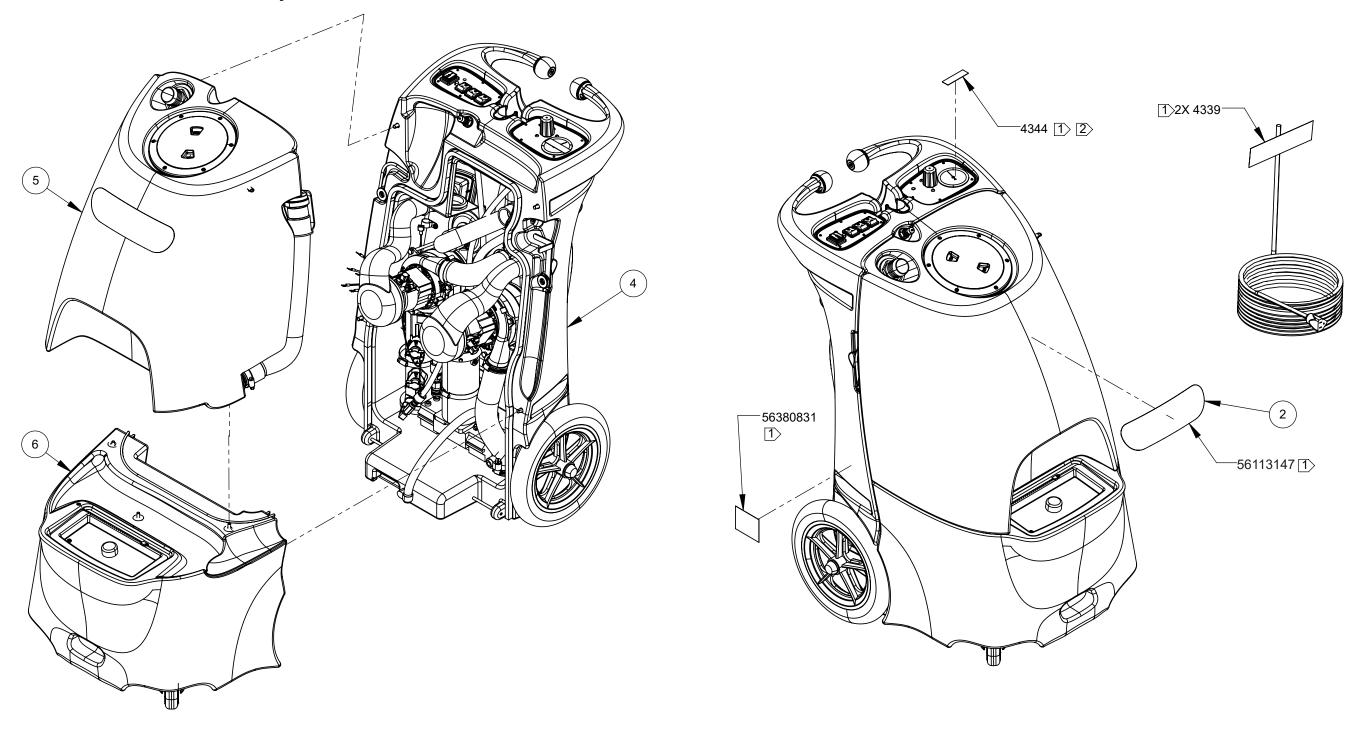


# **Assemblies and Parts Lists**

The following ServPro PEX 500 - Item #635K major assemblies are detailed in this section:

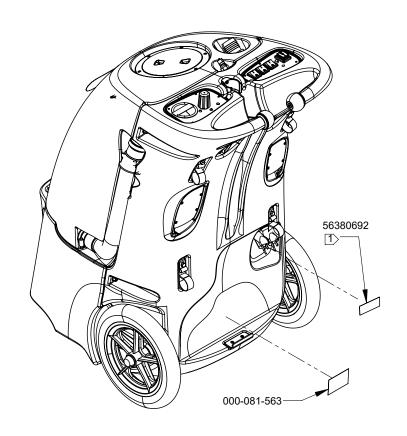
Description	Page
■ PEX 500 - Item #635K - Final Assembly and Parts List	22
■ PEX 500 - 120V/60Hz - Pallet Assembly and Parts List	24
■ PEX 500 - SP - Solution System Assembly and Parts List	31
■ PEX 500 - SP - Recovery System Assembly and Parts List	33
■ PEX 500 - Syphon Hose for HHP-12 Assembly and Parts List	35
■ PEX 500 - Heater - Complete - 120V 2000W Assembly and Parts List	36
■ PEX 500 - Motor 120V/60Hz - Assembly and Parts List	38
■ PEX 500 - Pressure Relief Assembly and Parts List	39
■ PEX 500 - Pump 120V-500 PSI Assembly and Parts List	40
■ PEX 500 - Switch Panel - 120V/60Hz Assembly and Parts List	41
■ PEX 500 - Unloader Valve Assembly and Parts List	42
■ PEX 500 - Ball Float Assembly and Parts List	43

Figure 1. PEX 500 - Item #635K Final Assembly



PEX 500 - Item #635K Final Assembly Parts List

Item	Part Number	Description	Qty
1	2154	POWER CORD 12/3 SJTW 25 Y	2
2	56113E30	DECAL SYSTEM PEX 500H-SP	1
3	56044659	MANUAL, PEX 500 - 120V/60Hz	1
4	56113E01	PALLET SYSTEM PEX 500 120V/60Hz	1
5	56113E29	RECOVERY SYSTEM PEX 500 SP	1
6	56113E28	SOLUTION SYSTEM - PEX 500 SP	1
7	SUBSYP1	SYPHON HOSE FOR HHP-12	1



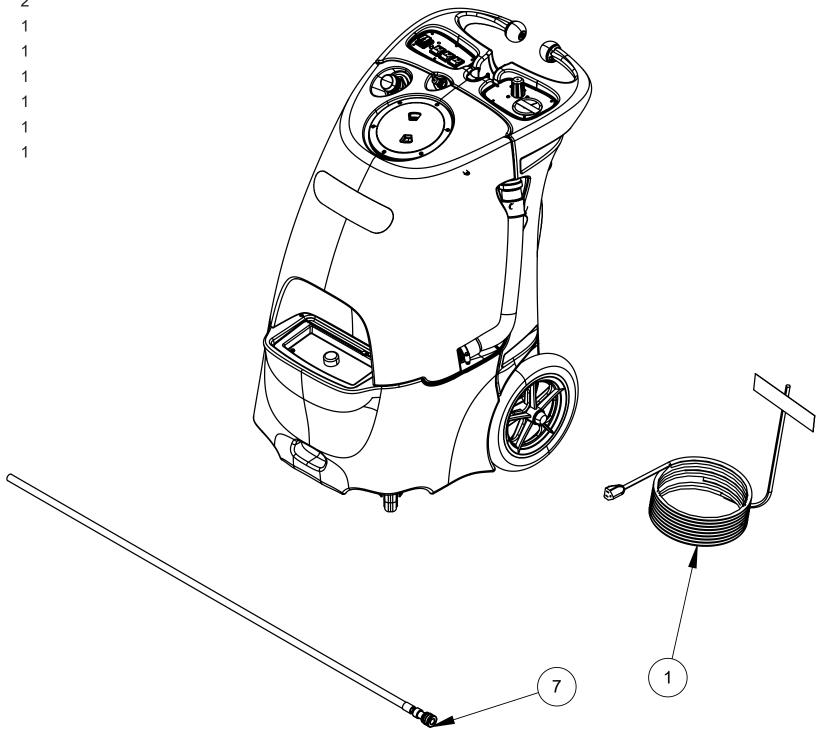




Figure 2. PEX 500 - 120V/60Hz - Pallet Assembly

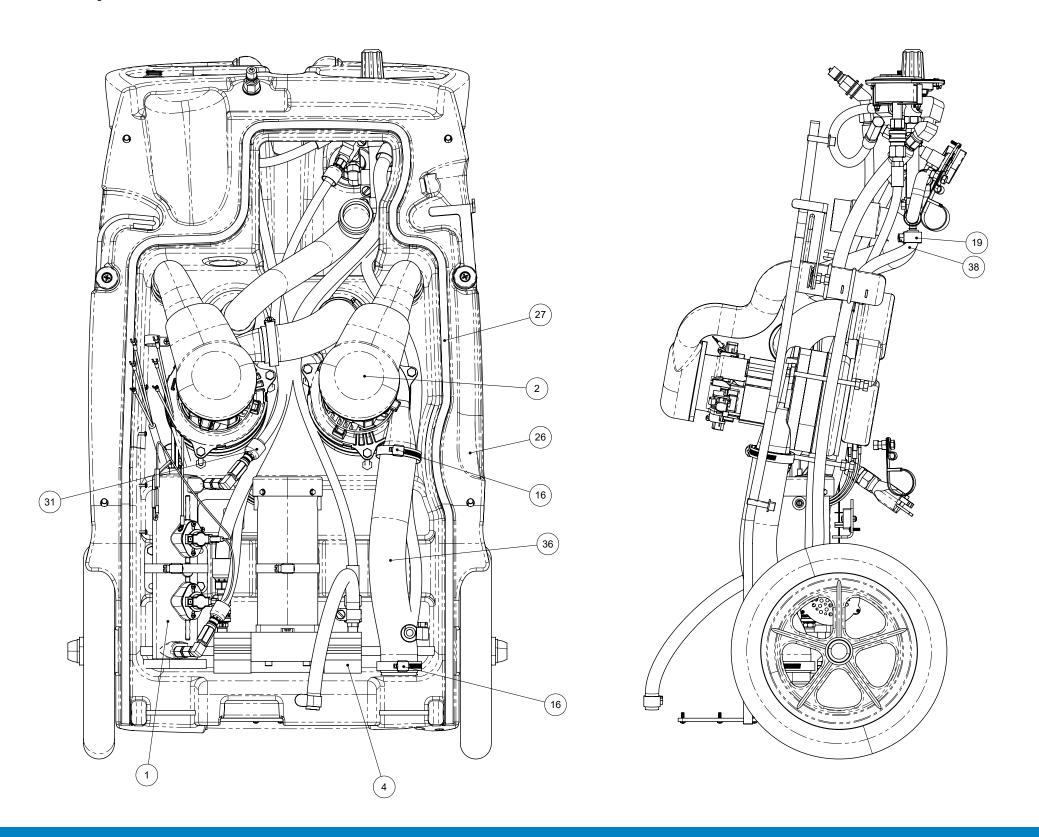




Figure 3. PEX 500 - 120V/60Hz - Pallet Assembly

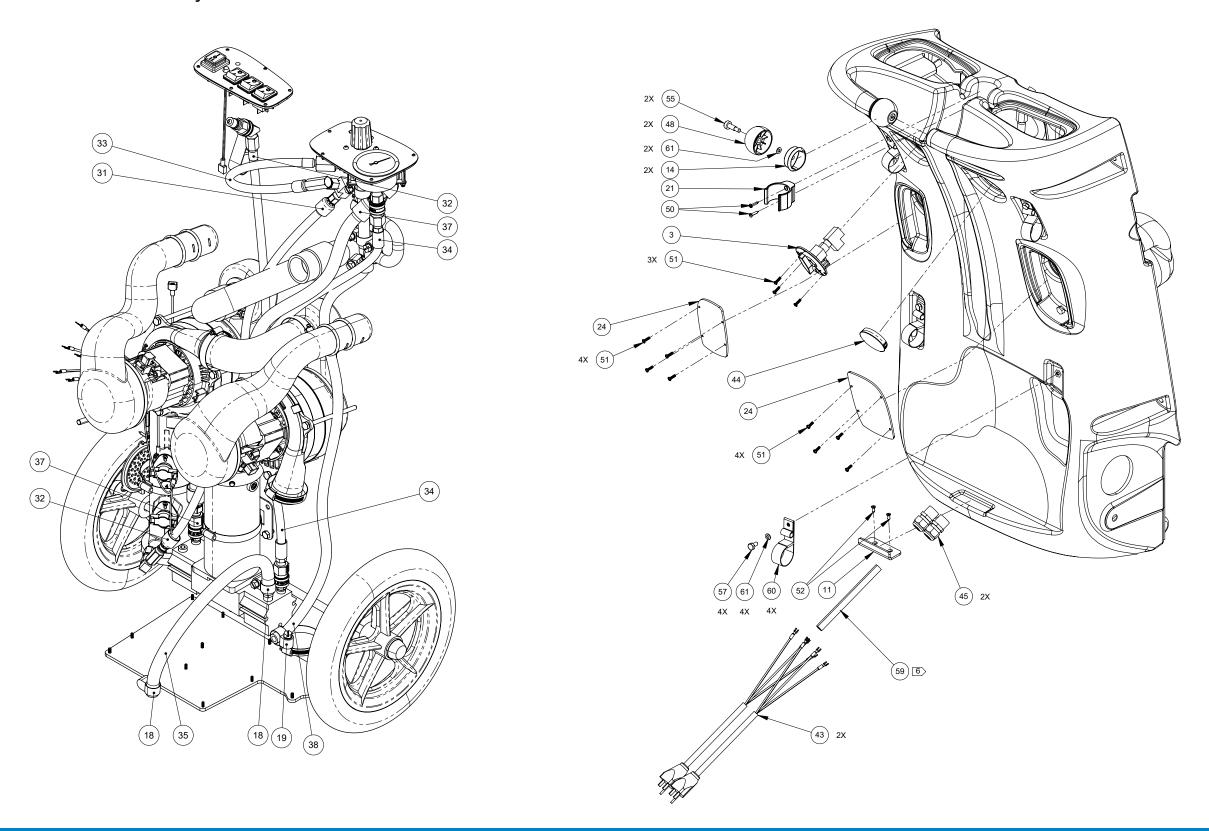
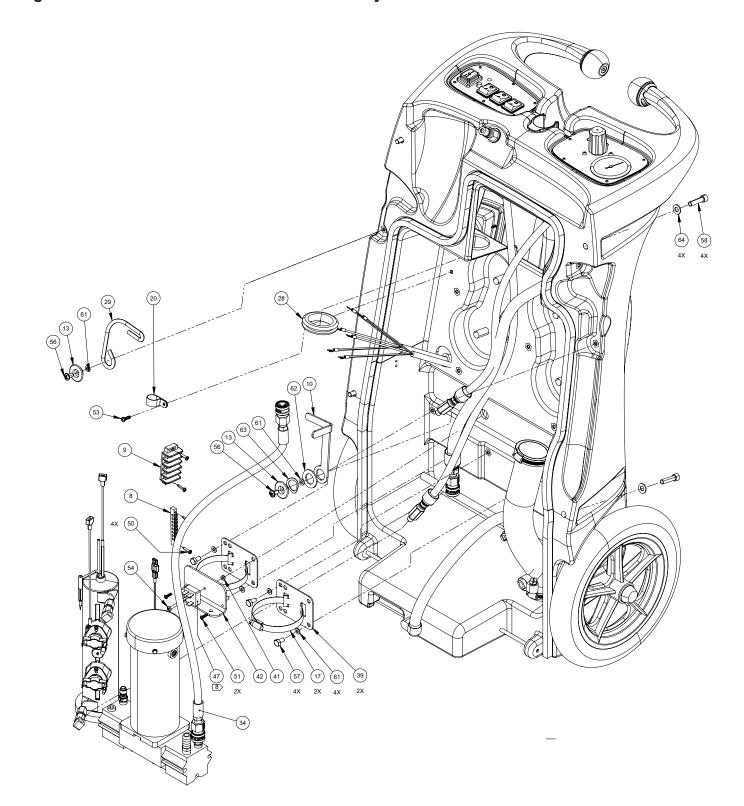


Figure 4. PEX 500 - 120V/60Hz - Pallet Assembly



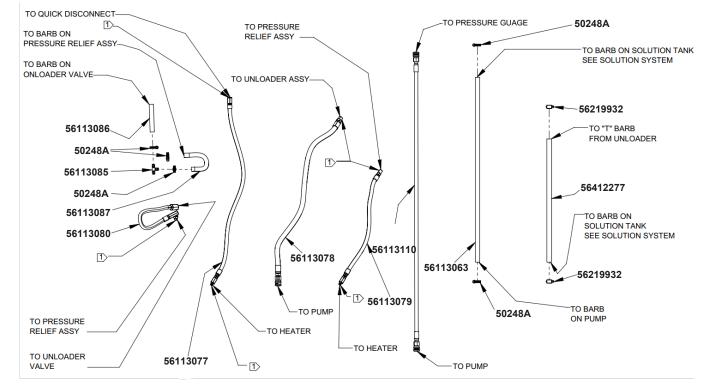




Figure 5. PEX 500 - 120V/60Hz - Pallet Assembly

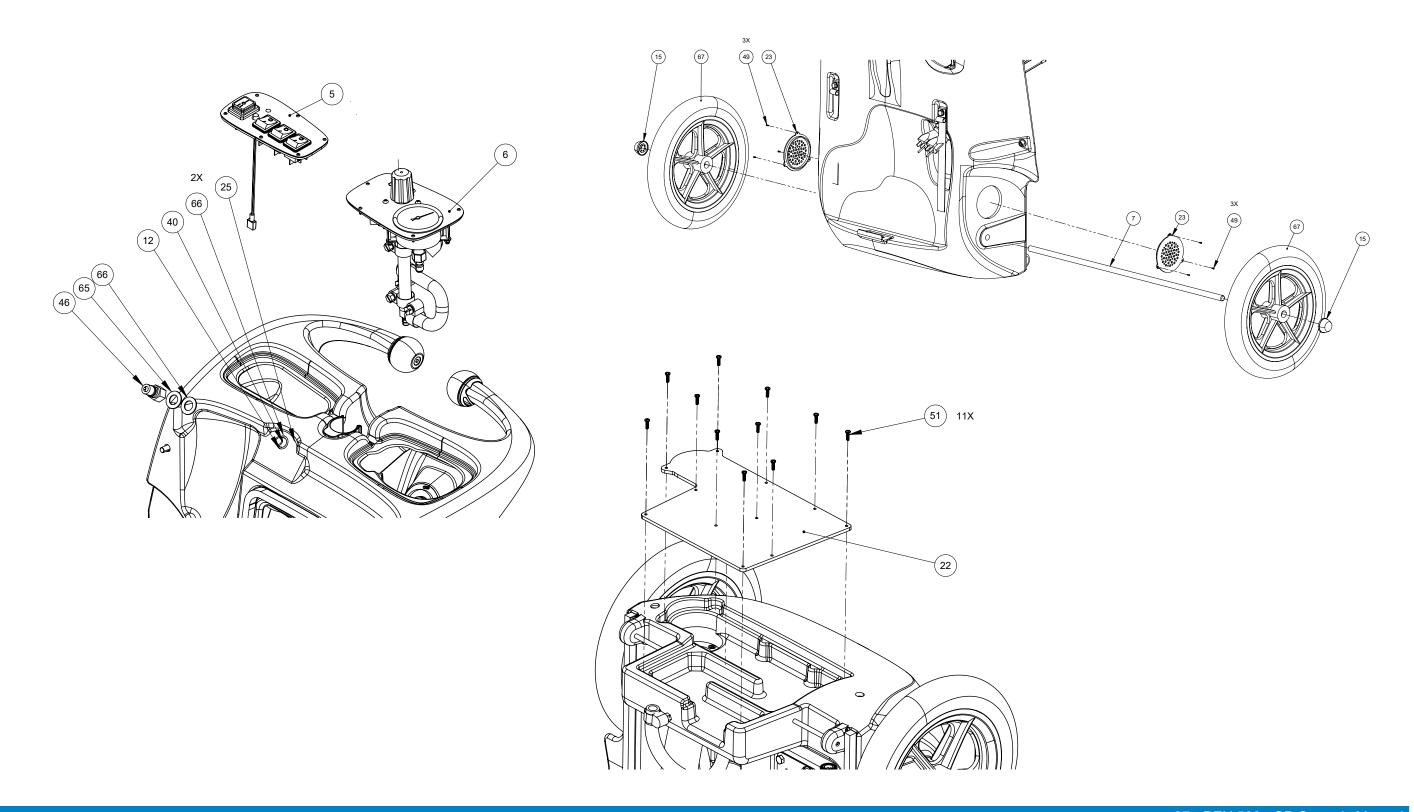


Figure 6. PEX 500 - 120V/60Hz - Item #635K Pallet Assembly







# Pallet System PEX 500 - 120V/60Hz - Assembly Parts List

Item	Part Number	Description	Qty	Item	Part Number	Description	Qty
1	56113058	ASSEMBLY, HEATER - COMPLETE-120V 2000W	1	29	56113021	HANGER, HOSE S/S	1
2	102-004-001	ASSEMBLY, MOTOR - PEX 500 120V/60Hz	1	30	56113046	HARNESS, MAIN	1
3	56113104	ASSEMBLY, PRESSURE RELIEF	1	31	56113079	HOSE ASSEMBLY, 1/4" I.D. X 23.5" LG.	1
4	56113074	ASSEMBLY, PUMP 120V-500PSI	1	32	56113077	HOSE ASSEMBLY, 1/4" I.D. X 34" LG.	1
5	102-019-001	ASSEMBLY, SWITCH PANEL - PEX 500 120V/60Hz	1	33	56113080	HOSE ASSEMBLY, 1/4" I.D. X 90° X 16" LG.	1
6	56113105	ASSEMBLY, UNLOADER VALVE	1	34	56113110	HOSE ASSEMBLY, THROB PEX	1
7	910-2450	AXEL, ROD 1/2" ROUND Z/P	1	35	56412277	HOSE, 1/2" SOLUTION	1
8	000-012-023	BLOCK, JUNCTION 6 SINGLE ROW	1	36	430A	HOSE, 2" RUBBER VACUUM X 13.5" LG.	1
9	000-012-022	BLOCK, TERMINAL 5 DOUBLE ROW 200HB	1	37	56113078	HOSE, 3/8 ID 1/4 QD 3/8MNPT	1
10	56384656	BRACKET, HOSE CLIP COATED	1	38	56113063	HOSE, 3/8" ID x 30" LG.	1
11	56113035	BRACKET, WAND COATED	1	39	455USP	MOUNT, HEAT EXCHANGER - CTD - PEX	2
12	116A	BUSHING, 3/4" O.D. X 9/16" I.D.	1	40	000-052-517	NIPPLE, 1/4" NPT CLOSE	1
13	56113093	BUSHING, HOSE HANGER	2	41	000-094-059	NUT, #8-32UNC HEX NYLOCK	1
14	56113019	BUSHING, ROLLER BALL - PALLET	2	42	2025A	PLATE, HEAT SINK BRIDGE RECTIFIER	1
15	27AUSP	CAP, AXEL NUT - BLACK PLASTIC	2	43	56113076	POWER CORD PIGTAL - 120V	2
16	000-033-010	CLAMP, SIZE #32 HOSE	2	44	56900000	PLUG, 2" BLACK DOME NYLON	1
17	000-033-013	CLAMP, SIZE #48 HOSE (3")	2	45	000-108-050	PROTECTOR, ELECTRIC CORD LOCK BULKHEAD	2
18	000-033-004	CLAMP, SIZE #6 MINI HOSE	2	46	000-052-050	QUICK CONNECT, 440 MALE W/ VITON STD	1
19	000-033-006	CLAMP, SIZE #8	2	47	1579	RECTIFIER BRIDGE 15 AMP 1000	1
20	56442003	CLAMP, 3/4" CABLE	1	48	56113017	ROLLER BALL, PALLET	2
21	000-033-146	CLIP, WAND HOLDING 1.50"	1	49	297	SCREW, #2 X 1/4" LG. FLAT S/S SMS PHILLIPS	6
22	56113016	COVER, EXHAUST CHAMBER	1	50	56003863	SCREW, #6 X 0.75" LG. SMS PAN PHILLIPS	6
23	000-041-917	COVER, EXHAUST OUTLET	2	51	267	SCREW, #6 X 1/2" LG. S.M.S. PAN S/S	24
24	56113015	COVER, INTAKE - PALLET	2	52	56003858	SCREW, #8 X 0.50" LG. SMS SOC HEAD	2
25	000-052-082	ELBOW, 1/4" NPT STREET x 45°	1	53	376	SCREW, #8 X 5/8" LG. AB PAN - TAPPING	1
26	56113014	EQUIPMENT PALLET	1	54	000-143-051	SCREW, #8-32UNC x 0.75" LG. BINDER HEAD	1
27	56113064	GASKET, PALLET	1	55	000-143-591	SCREW, 5/16 X 5/8 SHOULDER 1/4-20 S/S	2
28	56056215	GROMMET, 2" ID X 1/4" GRV X 1-3/4" HOLE	1	56	56002828	SCREW, 1/4"-20UNC X 0.6" LG. PAN PHILLIPS LOC	2



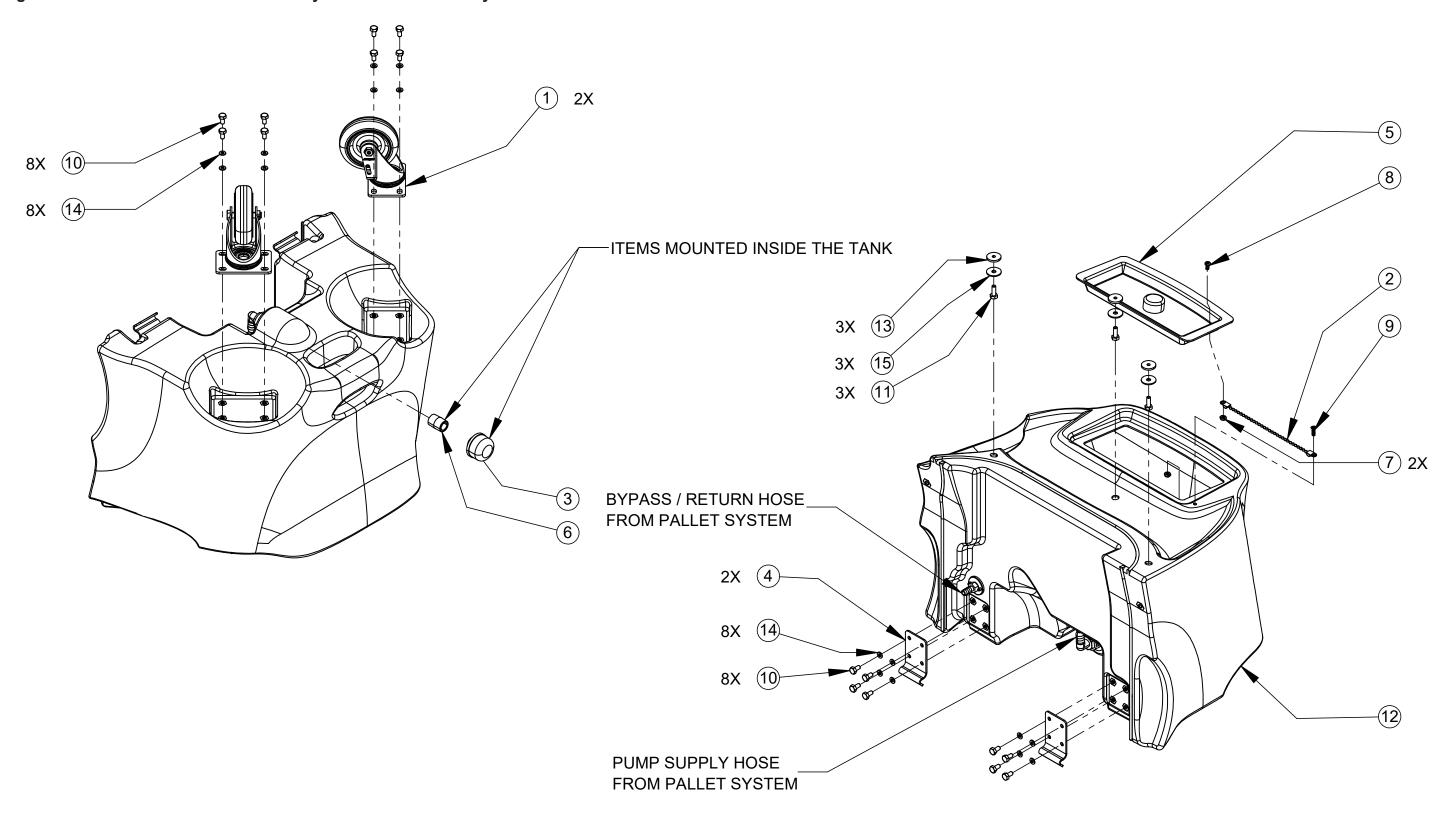
# Pallet System PEX 500 - 120V/60Hz - Assembly Parts List

Item	Part Number	Description	Qty
57	000-143-333	SCREW, 1/4"-20UNC x 0.50" LG. S/S HEX HEAD	8
58	56003798	SCREW, 5/16"-18UNC X 1.25" LG. SOCKET HEAD	4
59	912	SHRINK TUBING 1/2 RED POLYOLI	6'
60	1603	STRAP/BUCKLE CORD WRAP w/SPUR GROMMET	4
61	000-174-001	WASHER, #10 FLAT	12
62	56004000	WASHER, 0.765 I.D. X 1.312 O.D. X 0.090 FLAT S/S	1

Item	Part Number	Description	Qty
63	56004001	WASHER, 0.8" I.D.X1.1" O.D.X0.021" DIS SPR S/S	1
64	000-174-049	WASHER, 5/16" FLAT	4
65	31USP	WASHER, 9/16" I.D. X 1" O.D. X 1/16" BRASS	1
66	115USP	WASHER, 9/16" I.D. X 1" O.D. X 1/16" FIBER	3
67	2092	WHEEL, 12" X 1" BLACK ON GRAY 1/2" AXLE	2



Figure 7. PEX 500 - HM 23050 Solution System - EX30 Assembly





PEX 500 - HM 23050 Solution System - EX30 Assembly Parts List

Item	Part Number	Description	Qty
1	905USP	CASTER SWIVEL 4 GRAY NON MA	2
2	805USP	CHAIN 8 W/ D COUPLINGS BOTH E	1
3	207A	FILTER 40 MESH S/S 1/2NPT FEM	1
4	56113034	PLATE, HINGE	2
5	901A	LID N/A/KENT SOLUTION TANK VA	1
6	92BUSP	NIPPLE PVC 1/2 N.P.T.	1
7	000-094-058	NUT, #10-32UNF HEX NYLOCK	2
8	33	SCREW 10-32 X 3/8 SLOTTED	1
9	22	SCREW 10-32 X 5/8 MS FLAT	1
10	000-143-333	SCREW, 1/4"-20UNC x 0.50" LG. S/S HEX HEAD	16
11	000-143-001	SCREW, 1/4"-20UNC x 0.75" LG. HEX HEAD	3
12	56113156	SOLUTION TANK-EX30	1
13	290	WASHER EPDM 7/32 X 1/8	3
14	000-174-001	WASHER, #10 FLAT	16
15	000-174-200	WASHER, 0.26" ID X 1" FLAT X 0.074" THK. SS	3

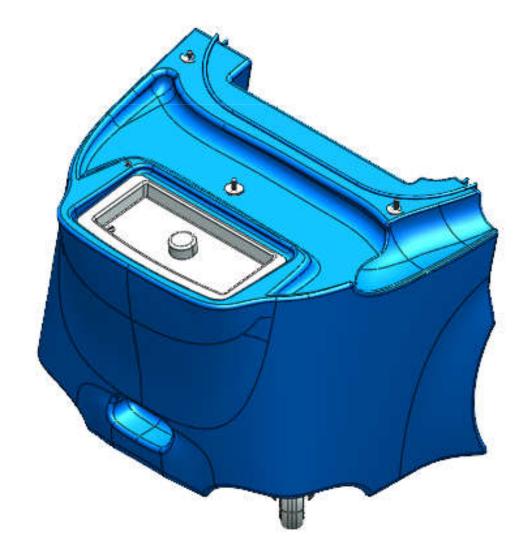
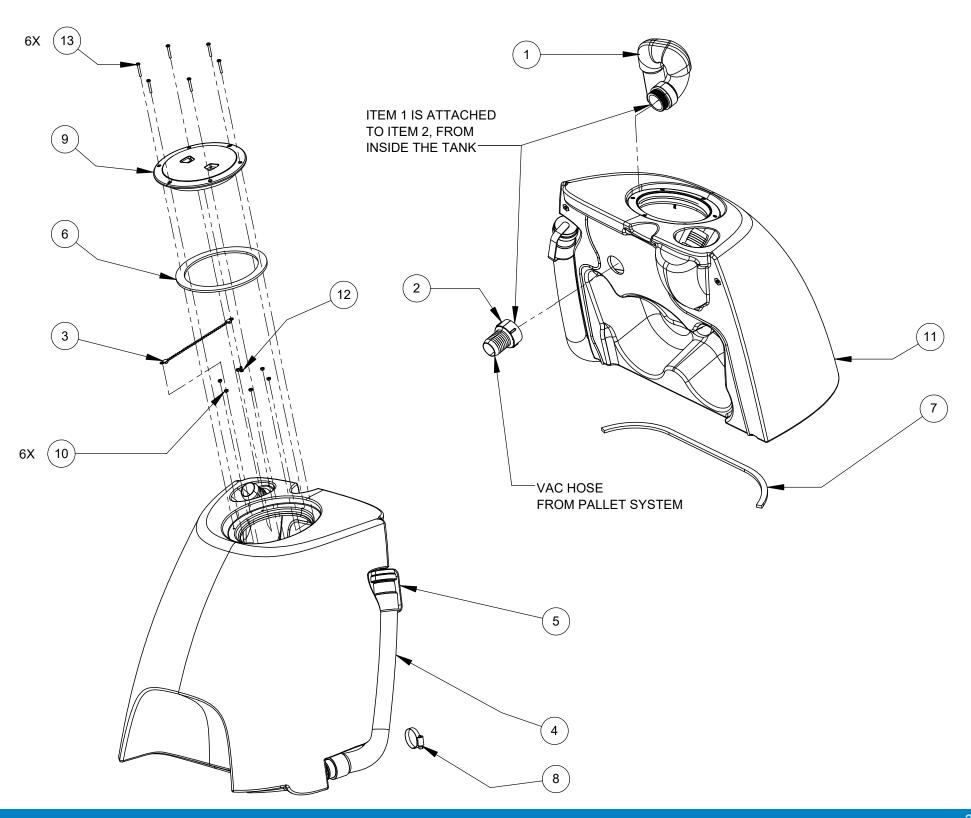




Figure 8. PEX 500 - HM 23050 Recovery System Assembly





PEX 500 - HM 23050 Recovery System Assembly Parts List

Item	Part Number	Description	Qty
1	56113039	BALL FLOAT ASSY	1
2	1277	BARB 1-1/2 X FIPT ABS	1
3	805USP	CHAIN 8 W/ D COUPLINGS BOTH E	1
4	56105265	DRAIN HOSE ASSEMBLY-1.5IDX20.4	1
5	56105266	DRAIN HOSE BRACKET	1
6	1074	GASKET FOR ROUND LID 2086	1
7	56113036	GASKET-RECOVERY TANK	1
8	1518	CLAMP, 3/4" X 1-3/4" HOSE S/S	1
9	56383435	LID CLEAR WITH RING ASSEMBLY	1
10	000-094-059	NUT, #8-32UNC HEX NYLOCK	6
11	56113158	RECOVERY TANK-EX30	1
12	808	SCREW 6 X 3/8 S/S TRUSSHEAD P	1
13	000-143-731	SCREW, #8-32UNC X 1.125" LG. PHILLIPS HEAD S/S	6

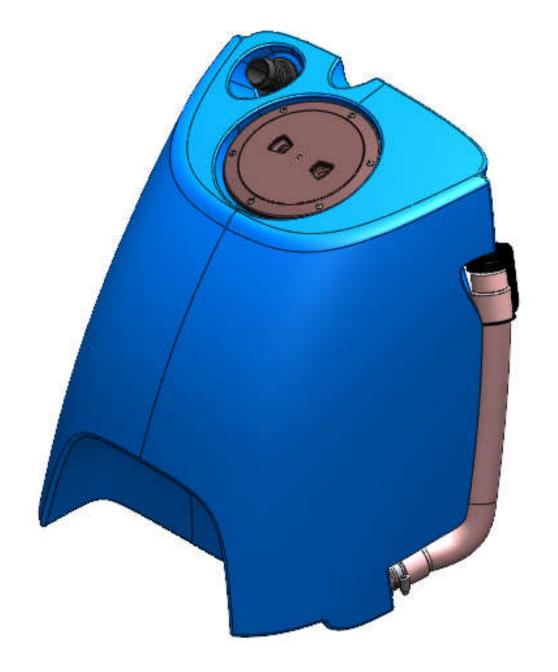
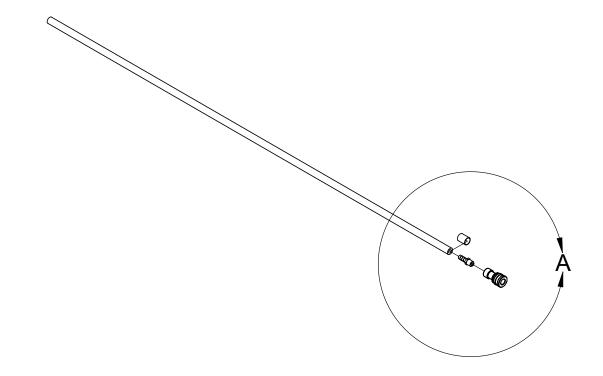
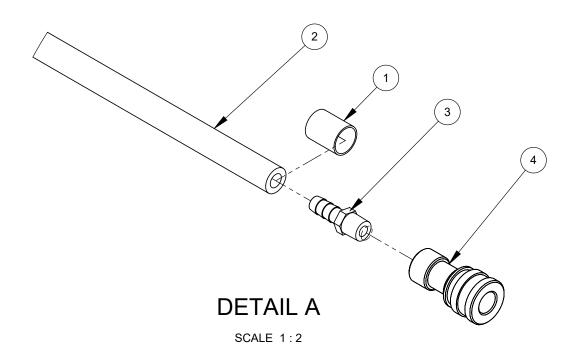
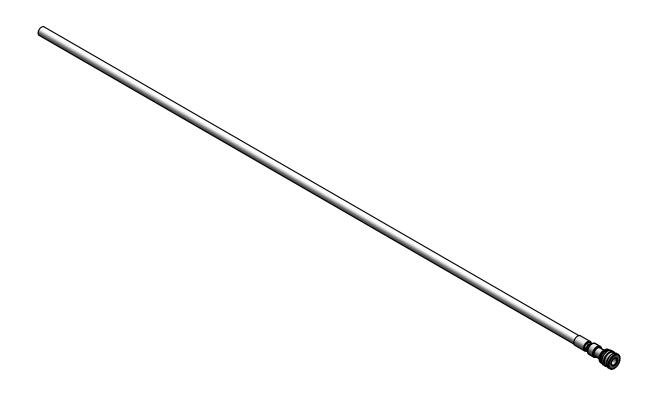




Figure 9. PEX 500 - Syphon Hose For HHP-12 Assembly



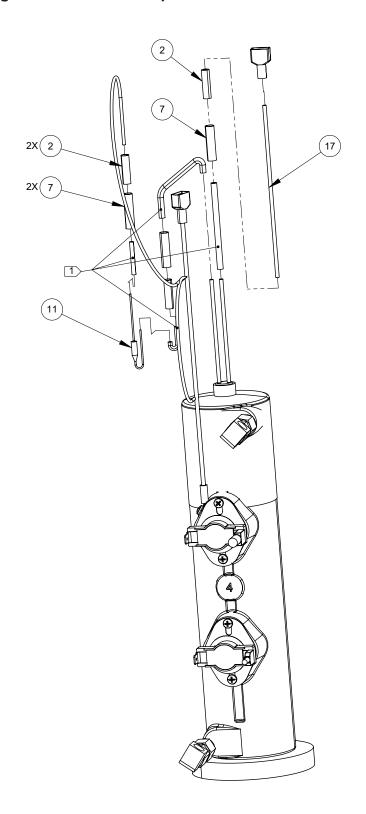


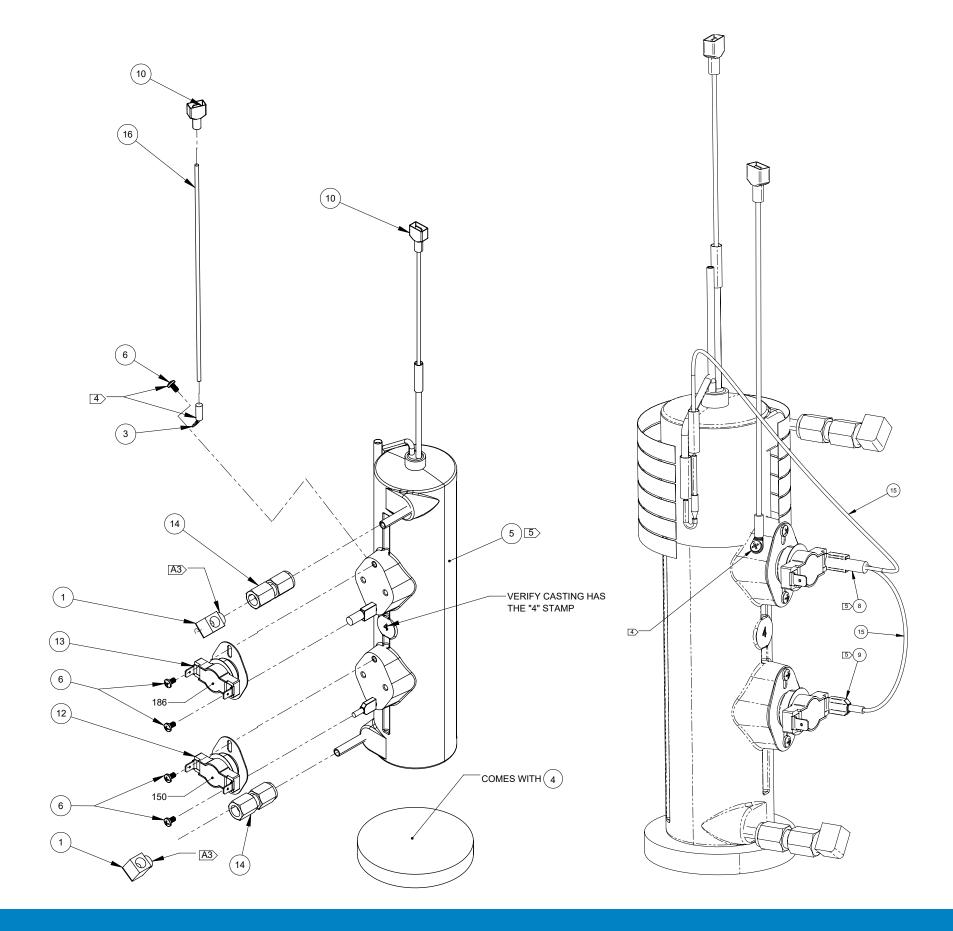


PEX 500 - SYPHON HOSE FOR HHP-12 Assembly Parts List

Item	Part Number	Description	Qty
1	4353	FERRULES FOR 3/8 HOSE	1
2	925	HOSE 3/8" ID, 0.688" OD, 54 INCH, RED	1
3	000-052-102	INSERT, #46 (1/4" NPT x 3/8" BARB)	1
4	000-052-051	QUICK CONNECT, 440 FEMALE w/ EPDM O-RING	1

Figure 10. Heater- Complete - 120V 2000W Assembly







PEX 500 - Heater - Complete -120V 2000W Assembly Parts List

Item	Part Number	Description	Qty
1	000-052-084	ELBOW, 1/8" NPT STREET	2
2	87B	ELECT BUTT CONN 12 TO 14 STEP	3
3	66	ELECT RING CONN 14-16 GA 4-6	1
4	2161	HEATER WRAP 1/2 FOAM FLAM	1
5	000-065-010	HEATER, COMPLETE-120V 2000W CAST ASSY	1
6	1089	SCREW, #6-19 X 1/4" HI-LOW PAN HEAD S/S	5
7	445C	SHRINK TUBING, 1/4" I.D. BLACK	3
8	000-037-022	TERMINAL, FULLY INSULATED FEMALE, 12-10 GA	1
9	000-037-012	TERMINAL, FULLY INSULATED FEMALE, 16-14 GA	1
10	56172230	TERMINAL, FULLY INSULATED MALE, 16-14 GA	2
11	81	THERMAL CUT-OUT RED 262°	1
12	56113030	THERMOSTAT, SNAP ACTION 150°	1
13	399	THERMOSTAT, SNAP ACTION 186°	1
14	157C	TUBE FITTING 1/4 TUBE X 1/8 P	2
15	000-178-160	WIRE, 14 AWG UL1015 BLACK BULK	1.67'
16	000-178-164	WIRE, 14 AWG UL1015 GRN/YEL STRIPE BULK	0.75'
17	000-178-161	WIRE, 14 AWG UL1015 WHITE BULK	0.4'

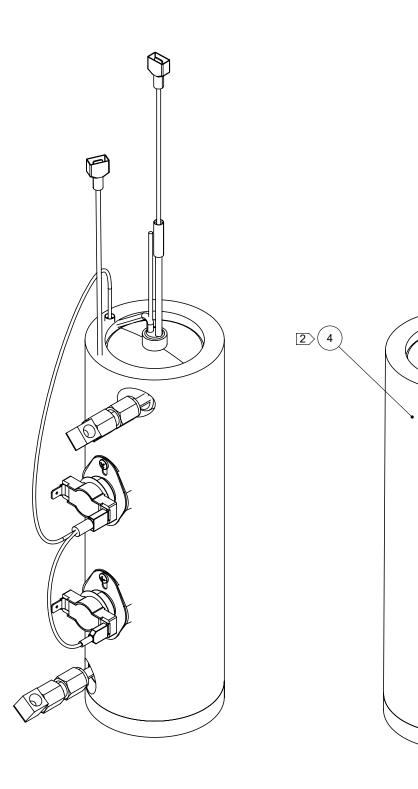
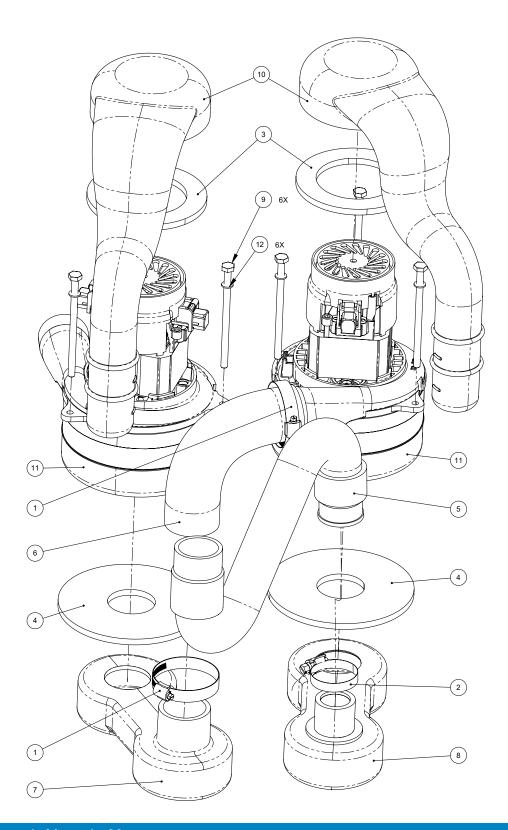




Figure 11. PEX 500 - Motor - 120V/60Hz Assembly



PEX 500 - Motor - 120V/60Hz Assembly Parts List

Item	Part Number	Description	Qty
1	000-033-010	CLAMP, SIZE #32 HOSE	2
2	1518	CLAMP, 3/4" X 1-3/4" HOSE S/S	1
3	56113033	GASKET, VAC INTAKE Ø3.00" I.D.	2
4	2013A	GASKET, Ø5-1/2" 1 SIDE ADHESIVE	2
5	56113127	HOSE, 1.5" VACUUM X 19" LG.	1
6	56113135	HOSE, 2" RUBBER VACUUM X 7.75" LG.	1
7	000-090-105	MANIFOLD, VACUUM MOTOR BLACK - LEFT	1
8	000-090-107	MANIFOLD, VACUUM MOTOR BLACK - RIGHT	1
9	56002675	SCREW, 1/4"-20UNC X 4.25" LG. HEX	6
10	56113032	VAC MOTOR INTAKE-3 STAGE	2
11	56113144	VAC MOTOR-8A-120V-3 STAGE	2
12	000-174-001	WASHER, #10 FLAT	6

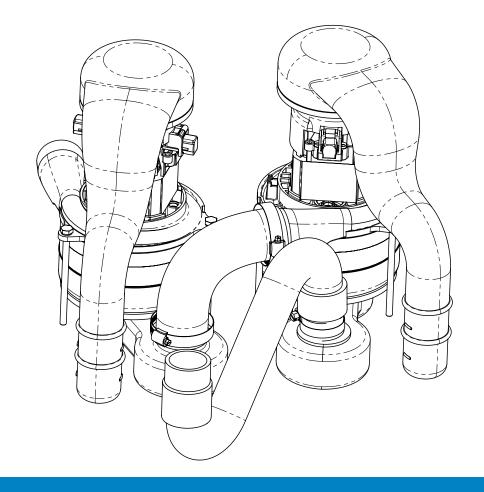
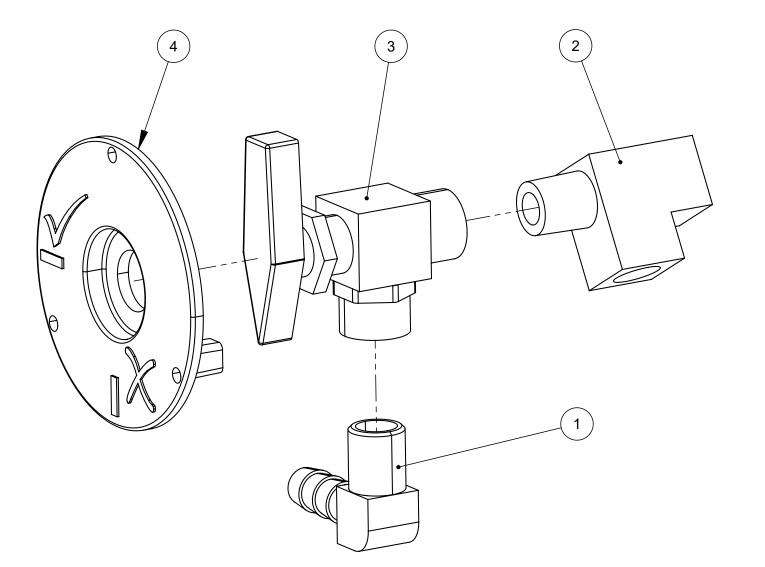




Figure 12. PEX 500 - Pressure Relief Assembly

PEX 500 - Pressure Relief Assembly Parts List

Item	Part Number	Description	Qty
1	56756739	ELBOW, 1/4 NPT X 3/8 BARB X 90° BRASS	1
2	000-052-090	TEE, 1/4" NPT BRANCH M-F-F	1
3	56113037	VALVE, 1/4" FPT X 1/4" FPT 2-WAY BALL	1
4	56113038USP	VALVE COVER	1



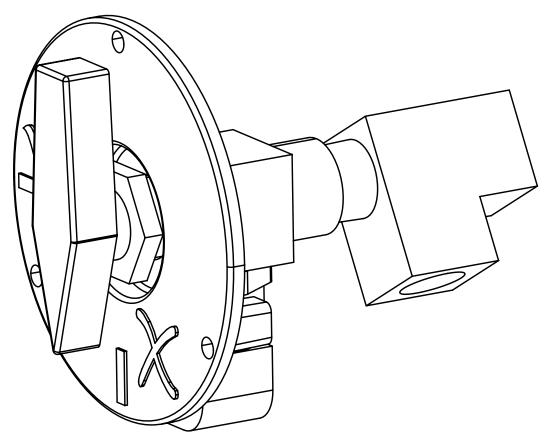
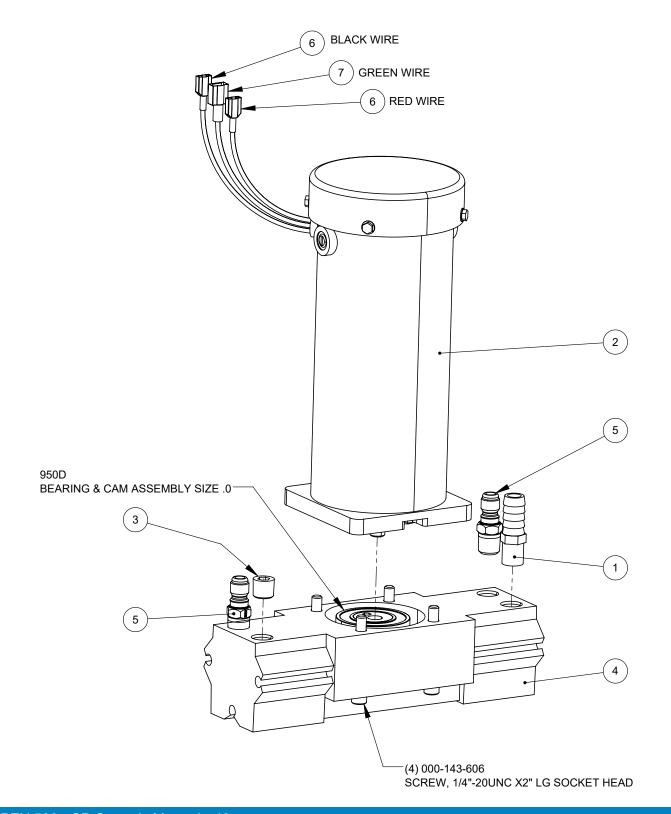




Figure 13. PEX 500 - Pump - 120V-500PSI Assembly



PEX 500 - Pump 120V-500PSI Assembly

Item	Part Number	Description	Qty
1	000-052-117	INSERT, #48 (1/4" NPT x 1/2" BARB)	1
2	56113065	MOTOR, DC 120V 500PSI	1
3	000-106-007	PLUG, 1/4" NPT ALLEN HEAD	1
4	950F	PUMP, PISTON STYLE 300-500 PS	1
5	000-052-940	QUICK CONNECT, 1/4 MPT OPEN CENTER - BRASS	2
6	000-037-012	TERMINAL, FULLY INSULATED FEMALE, 16-14 GA	2
7	000-037-009	TERMINAL, FULLY INSULATED MALE, 16-14 GA	1

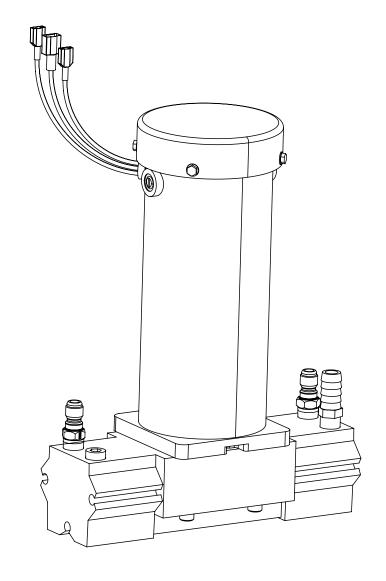
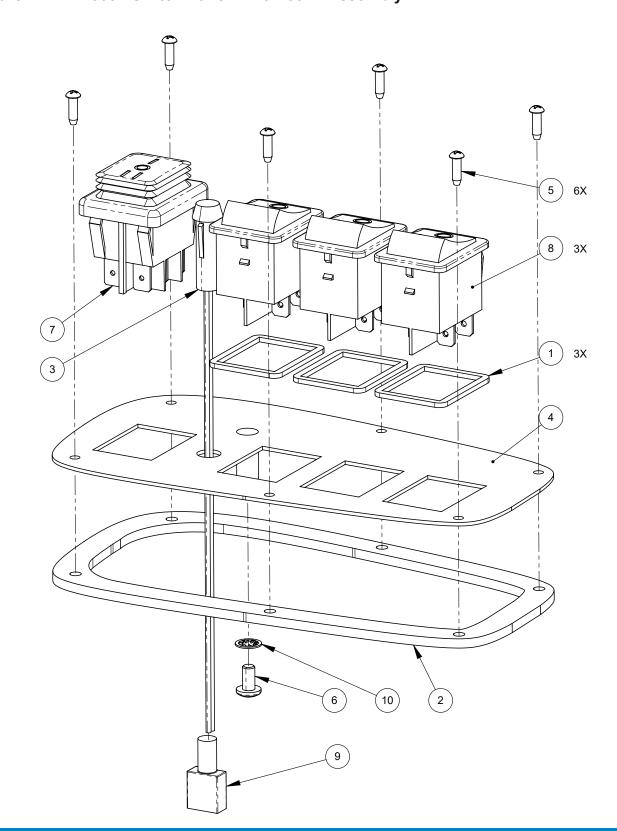




Figure 14. PEX 500 - Switch Panel - 120V/60Hz Assembly



PEX 500 - Swith Panel - 120V/60Hz Assembly

Item	Part Number	Description	Qty
1	000-057-273	GASKET, ROCKER SWITCH	3
2	56113124	GASKET, SWITCH PLATE	1
3	227	LIGHT, GREEN 250V SMALL NEON	1
4	56113028	PLATE, SWITCH 120V - SILK SCREEN	1
5	000-143-789	SCREW, #4-20 X 3/8" PAN PHILLIPS S/S - PLASTIC	6
6	56009066	SCREW, #8-32UNC X 0.31" LG. PAN PHILLIPS	1
7	56113029	SWITCH, ROCKER 3 POSITION	1
8	1644	SWITCH, ROCKER DPST ON/OFF 20AMP	3
9	000-037-009	TERMINAL, FULLY INSULATED MALE, 16-14 GA	1
10	000-174-211	WASHER, #8 INSIDE STAR	1

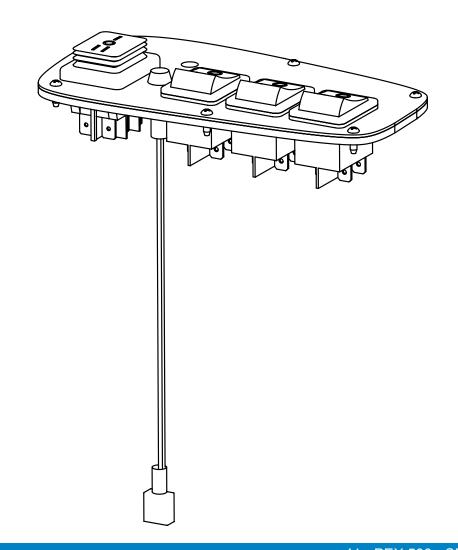
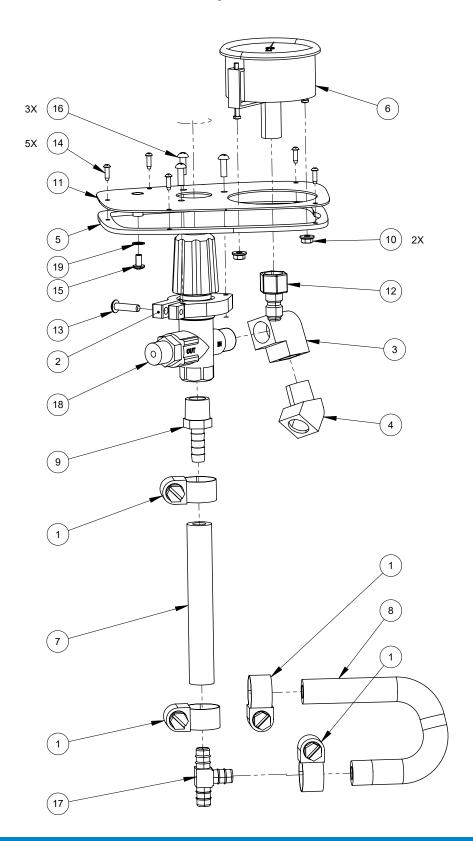


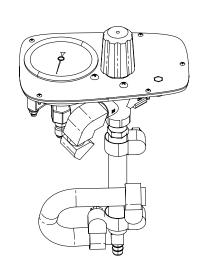


Figure 15. PEX 500 - Unloader Valve Assembly



**PEX 500 Unloader Valve Assembly** 

Item	Part Number	Description	Qty
1	000-033-006	CLAMP, SIZE #8	4
2	000-033-151	CLAMP, VALVE MOUNT - PEX 500	1
3	000-052-142	ELBOW, 3/8" F x F BRASS	1
4	000-052-083	ELBOW, 3/8" NPT STREET x 45°	1
5	000-057-274	GASKET, PRESSURE PLATE	1
6	2165	GAUGE, PRESSURE 1000 PSI 2-1/2"	1
7	56113086	HOSE, 3/8" ID X 4.5" LG.	1
8	56113087	HOSE, 3/8" ID X 8" LG.	1
9	000-052-104	INSERT, #66 (3/8" NPT x 3/8" BARB)	1
10	56003873	NUT, M4-0.7 HEX FLANGE S/S	2
11	56113027	PLATE, COVER PRESSURE 500 PSI - SILK SCREEN	1
12	219USP	QUICK CONNECT, 1/4" FPT BRASS	1
13	000-143-168	SCREW, #10-24UNC x 0.75" LG. BUTTON HEAD	1
14	000-143-789	SCREW, #4-20 X 3/8" PAN PHILLIPS S/S - PLASTIC	5
15	56009066	SCREW, #8-32UNC X 0.31" LG. PAN PHILLIPS	1
16	000-143-050	SCREW, #8-32UNC x 0.50" LG. PH PHILLIPS	3
17	56113085	TEE, 3/8" HOSE BARB - BRASS	1
18	000-169-250	VALVE, 3/8" NPT UNLOADER	1
19	000-174-211	WASHER, #8 INSIDE STAR	1



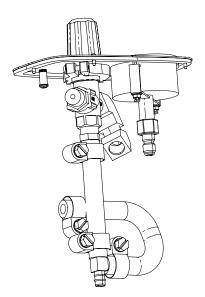
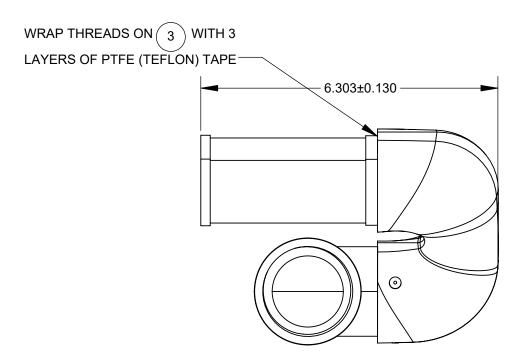
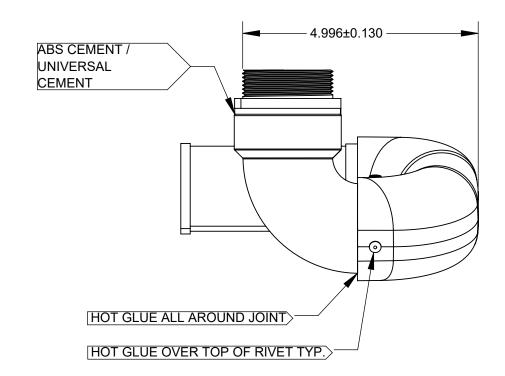
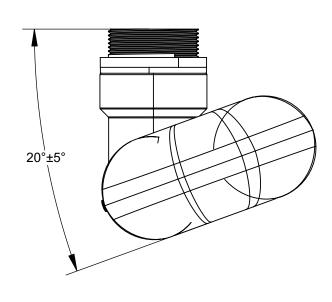




Figure 16. PEX 500 - Ball Float Assembly

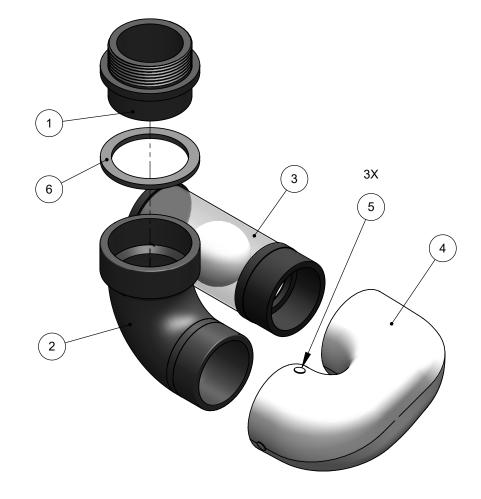






# PEX 500 Ball Float Assembly

Item	Part Number	Description	Qty
1	1154	ADAPTER, 1-1/2" TRAP ABS	1
2	1140	ELBOW, 1-1/2" STREET X 90° ABS	1
3	929B	FILTER, S/S BALL FLOAT WITH RIGID PVC CAP	1
4	56113092	MANIFOLD, BALL FLOAT - MOD	1
5	75	RIVET, 1/8" ALUMINUM (1/8 TO 1/4 GRIP)	3
6	187B	WASHER, 1-3/4" ID X 2-1/4" OD FLAT BUNA	1





# 2 Year Limited Warranty

In the event of a claim under the limited warranty below, the exclusive remedy is for the manufacturer to repair or replace the product.

HydraMaster warrants to the original purchaser / user that this product is free from defects in workmanship and materials under normal use and service for a period of two (2) years from date of purchase. In addition, HydraMaster may, at its option, reimburse shipping costs (based on normal ground transportation costs) on outbound shipments of replacement parts for the first year from date of sale if those parts have been evaluated and determined to be covered by warranty. All inbound freight charges for warranty evaluations of parts or equipment are the responsibility of the owner. The original purchaser's EXCLUSIVE REMEDY is to have HydraMaster, at seller's option, repair or replace without charge, parts that fail under normal use and service, when operated and maintained in accordance with the applicable operation and instruction manuals.

This LIMITED WARRANTY does NOT apply to normal wear, or to items whose life is dependent on their use and care, such as belts, cords, switches, valves, hoses, rubber parts, electrical motor components or adjustments. This warranty does NOT apply to parts not manufactured by HydraMaster such as electric motors, pumps, gauges and electric circuit boards. These parts may be covered by, and are subject to, the warranties and/or quarantees of their manufacturers.

All returned items, which are replaced, become the sole property of HydraMaster, or its original manufacturer, whichever the case may be.

This LIMITED WARRANTY is applicable ONLY to the original user/ purchaser of this product. Customers should contact the distributor from whom they purchased the machine for warranty and service questions.

This warranty does NOT apply to damage from transportation, inadequate voltage, blown fuses, alterations by unauthorized persons, extremes in temperature, misuse or abuse of the equipment, or use of non-compatible chemicals. Damage is not covered by warranty.

If the serial number is missing, altered, or defaced all warranties are void.

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#### WARRANTY PROCEDURE

To facilitate any possible warranty claims, register online at www.hydramaster.com/support/ warrantyregistration.aspx and fill out this form completely within 10 days of date of purchase. You must save your sales invoice so you can provide proof of purchase date. Please be sure to fill out distributor information, they will be able to supply proof of purchase date in the event you are unable to find your sales invoice. In the event of the need for a warranty repair or replacement, follow this procedure:

- When contacting your distributor for a warranty repair or replacement of parts, please have the model and serial number of your, machine ready.
- A Returned Merchandise Authorization (RMA) number will be issued for any parts that need to be returned for warranty evaluation.

#### NO RETURNS WILL BE ACCEPTED WITHOUT A VISIBLE RMA NUMBER

Parts must be ordered through your distributor and will be billed to their account. You are responsible for any cost pending the return and evaluation of the part(s). You shall return the used parts to your distributor within 30 days for warranty evaluation. If the part(s) has not been returned, or if the evaluation determines the part is not covered under warranty, the invoice is due. If the parts(s) is determined to be under warranty, the part will be repaired or replaced under warranty terms, or credit will be issued to the distributor's account.